

### Abstract

A method and system for monitoring and reporting vehicle tire pressure information. The system includes tire pressure monitors mounted to the tires of a vehicle. The tire pressure monitors detect tire pressure information from their respective tires and transmit that information to transponders that are fixedly-mounted to the vehicle. Each tire pressure monitor corresponds to a single transponder. When a tire pressure monitor transmits tire pressure information, the corresponding transponder receives the signal and transmits the tire pressure signal along with a unique transponder identification code to a vehicle central system controller. Based upon the transponder identification code, the central controller associates the tire pressure information with a particular tire location. However, under certain conditions, a transmitted tire pressure signal is received by one or more of the non-corresponding transponders as well as the corresponding transponder. To filter out the stray tire pressure signals, each of the receiving transponders detects the strength of the received tire pressure signal. The system then determines which of the receiving transponders is the corresponding transponder based upon the respective signal strengths.